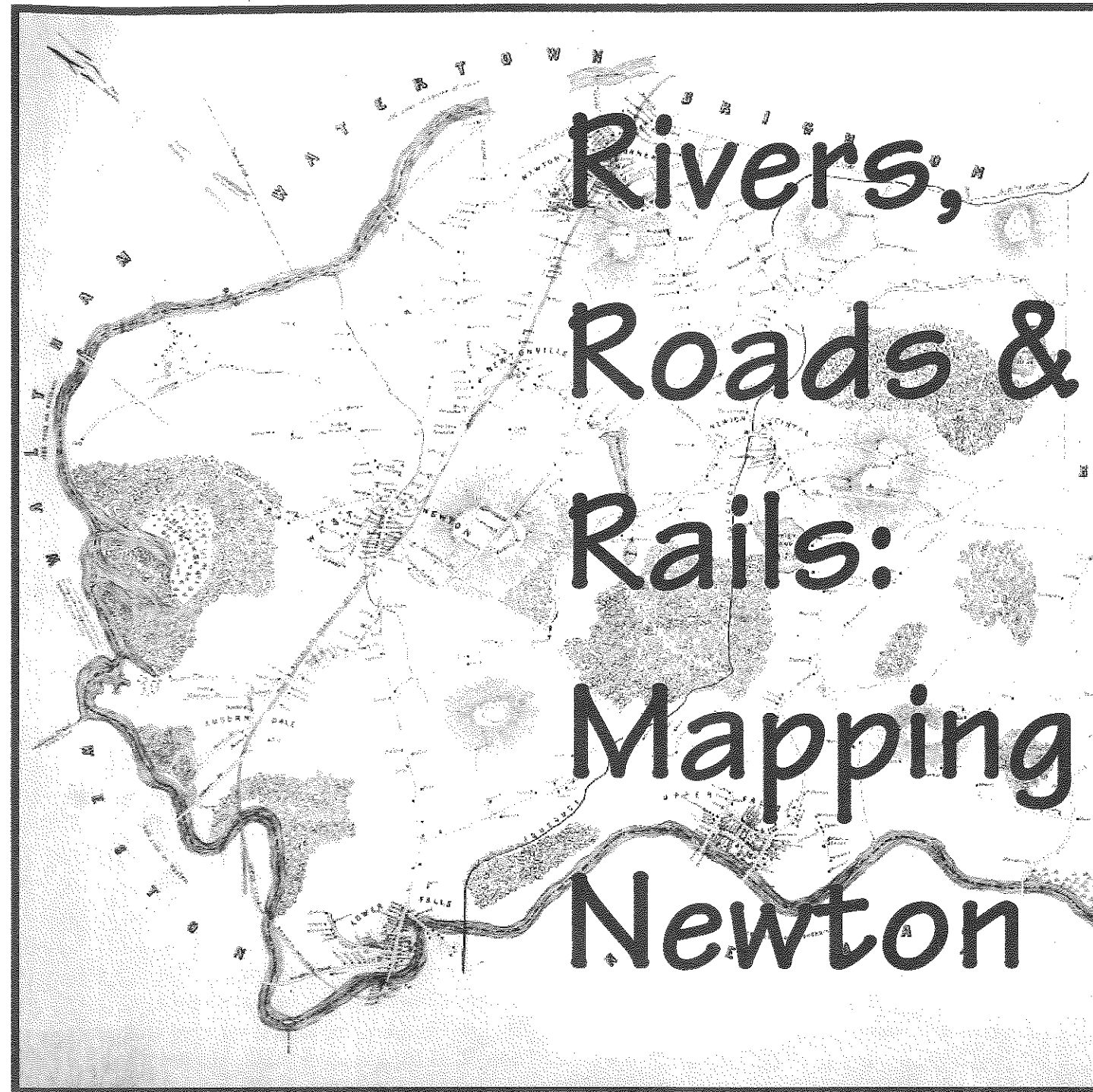


The Jackson Homestead
Newton's Museum & Historical Society
527 Washington Street
Newton, MA 02458



Rivers, Roads & Rails: Mapping Newton

Since the time of the voyages of discovery, maps have been made to describe the New England coast, to lay claim to land, to chart the spread of settlements, to record man's mark on the land, and as exercises in draftsmanship and geography. Primitive by today's standards, the earliest maps are evocative of the unknown. As knowledge and skills in surveying and mapmaking developed, they gradually become more sophisticated, delineating elements of the physical landscape that give shape and character to early towns. Maps also were made to show the changing political status of an area. Newton first appears as a part of Cambridge, then as a town, and after the American Revolution as a part of a new state: Massachusetts. Today, computer generated maps, which can be made for almost any purpose, provide new opportunities to learn about the world in which we live.

Recording physical elements and man-made changes, the maps in this exhibition provide context and connection between the past and present and provide insight into the reasons for Newton's dispersed pattern of settlement. On the earliest maps, the Charles River was a dominant feature shown both as a boundary and as the source of power for industrial development at the upper and lower falls and downstream at the Bemis Dam. Old Indian trails and paths "trodden" by early settlers going about their daily lives and crossing through to Dedham, Natick, and Sherborn, emerged as a basis for the street pattern that would develop over time. In

the seventeenth and eighteenth centuries, road building and bridge repairs were among the town's most pressing tasks and bridge sites over the Charles River were prominently marked on the early maps. The railroad reached Newton in the 1830s. This not only spurred local suburban development, but eventually linked the town to the rest of the state and beyond.

With each map and in each era there is a unique sense of place. By 1855, the Town of Newton, with two rail lines, a well-established street pattern, and seven villages, is presented in a shape and orientation that is familiar today.

—Susan Abele
Curator of Manuscripts
The Jackson Homestead
May 2001

A Plan of Newton, 1714, 1755, 1772

Joseph Burnap, Joseph Hewins, Alexander Shepard, Jr., Surveyors

... not supposed to be of any value.

Marshall S. Rice, 1877

In 1877, Town Clerk Marshall S. Rice reassembled pieces of an "ancient map" which he had found among some "old papers." He noted that the map was begun in 1714, the year John Staples was appointed Town Clerk, completed when Abraham Fuller held the office, and that it had been in the possession of subsequent Town Clerks for 162 years.

The text describing the map says that it is:

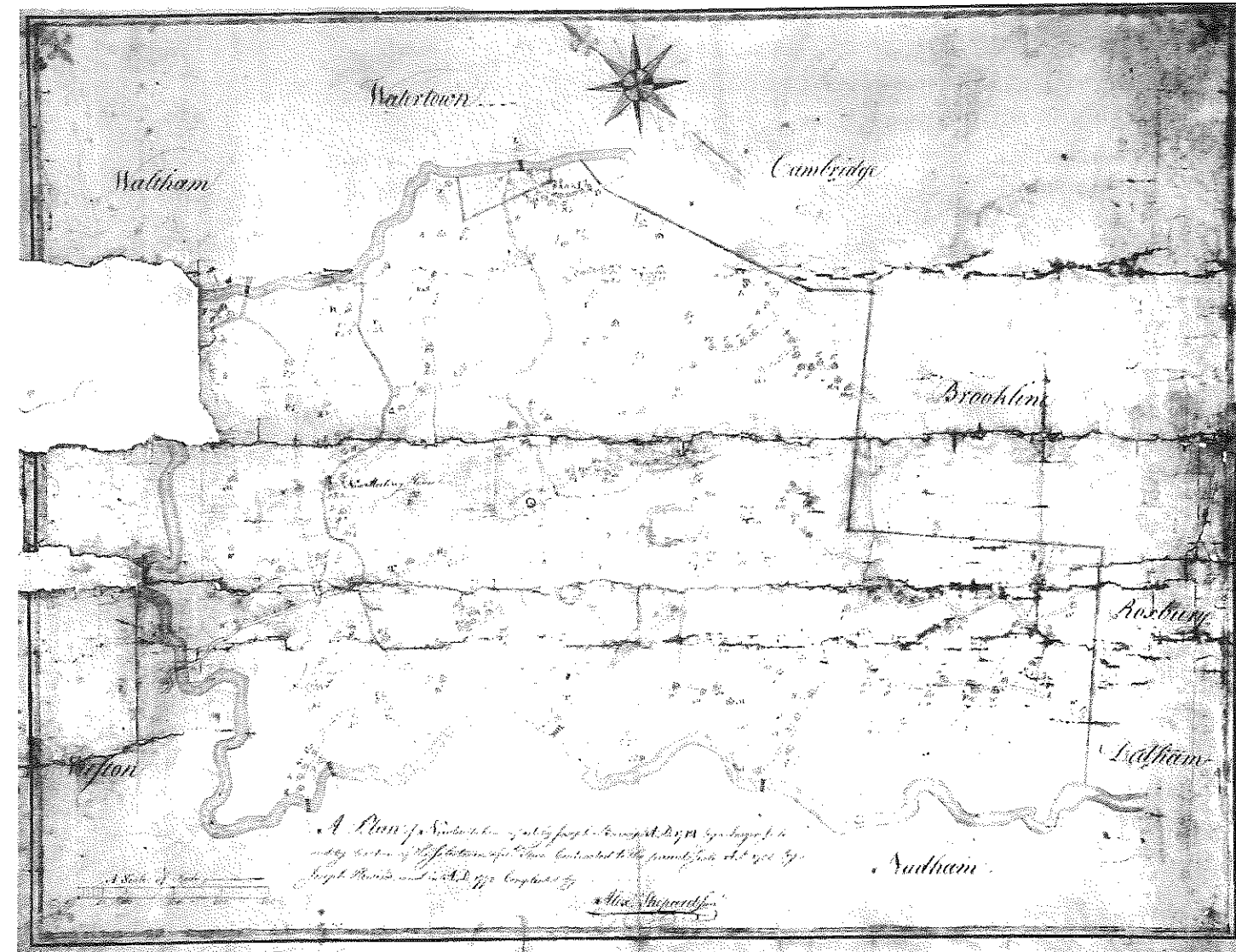
A plan of Newton taken in part by Joseph Burnap A.D 1714, by a Larger Scale and by direction of the Selectmen of said town Contracted to the present Scale A.D. 1755 by Joseph Hewins and in A.D. 1772 Completed by Alex. Shepard, Jun.

Despite this description, the purpose for which the map was made is not readily apparent. There is an alpha-numeric code attached to the more than 200 houses shown on the map that may correlate with the assessor's records. This has not been confirmed. There are no road or place names; only the "new" and "old" meeting houses are identified. A series of points describe the arcs of a circle with the "old" Meeting House at the center.

The circle would have been handed down from the earliest version of this map. In 1714, Lt.

Joseph Burnap was hired to find the "centre" of the Town in order to settle a controversy between the residents in the north and south sections of the town over the siting of a new meeting house. The "centre" was determined to be near the corner of Homer and Centre streets and the Meeting House was erected there in 1721.

Joseph Hewins began the map on display in 1755. The "new" Meeting House was built in 1764 to serve what would, in 1778, be incorporated as the West Parish. Alexander Shepard, who completed the map in 1772, would have added the designations "old" and "new" meeting house.



Plan of Township of Newton in the County of Middlesex, 1794

Jonathan Kingsbury, Junior, Surveyor

Newton's first town survey, made in 1794, was used to produce the map of Massachusetts Proper, which follows. The original survey is on file at the Massachusetts Archives. Newton City Engineer E. H. Harvey made this pen-and-ink copy in 1905. Courtesy of the City of Newton Engineering Department.

A Plan of the Township of Newton in the County of Middlesex, the Survey was taken in the year 1794 and laid down by a Scale of 200 Rods to an Inch agreeable to a Resolve of the General Court proposed June 1794.

The Reputed distance from ye Shire Town to the Center of said Town is Six Miles & half

The reputed distance from the Metropolis to said Center is Ten Miles

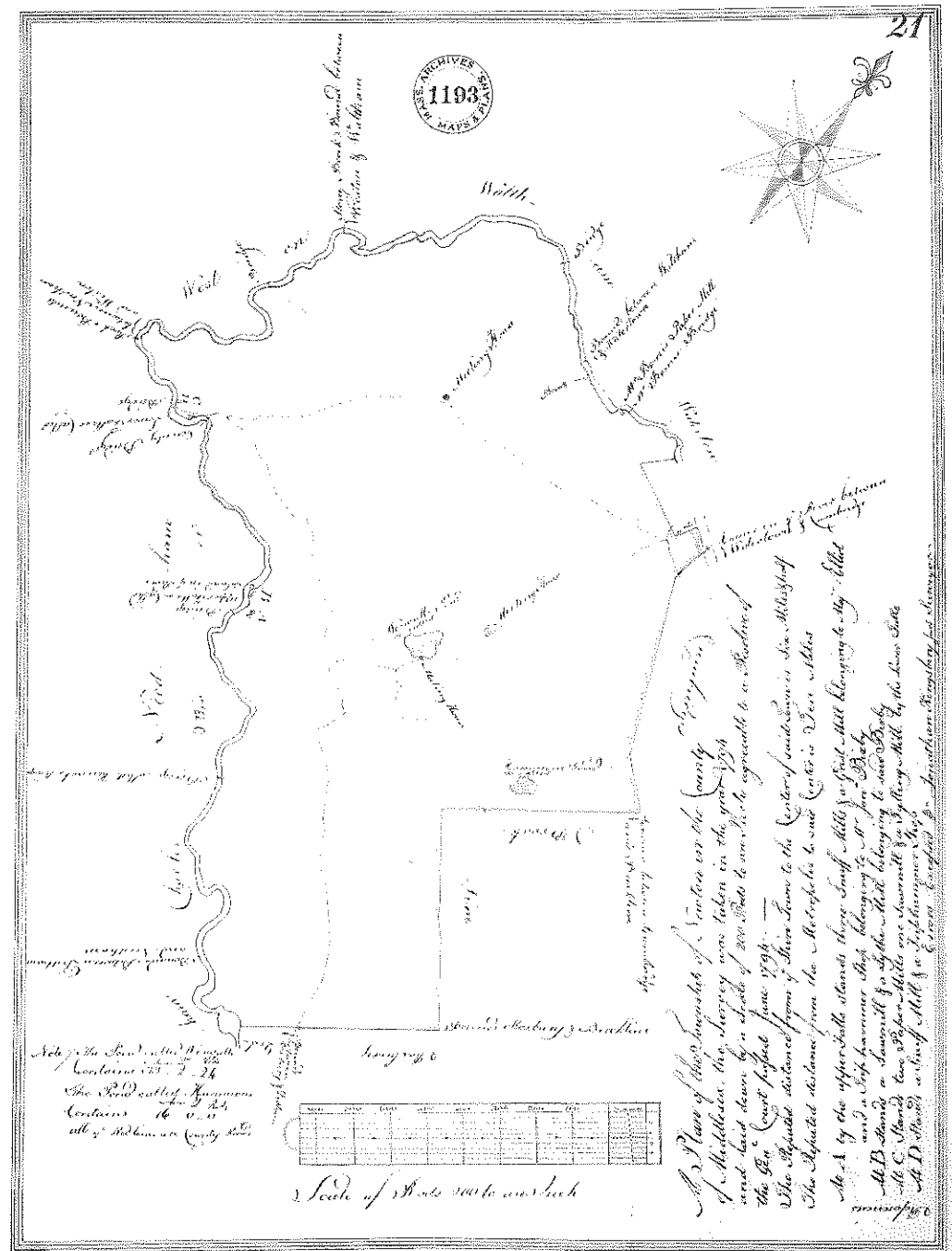
At A by the upper Falls stands three Snuff Mills & a Grist Mill Belonging to Maj^r. Elliot and a Trip hammer Shop belonging to Mr. Jonathan Bixby

At B Stands a Sawmill & a Sythe Mill belonging to said Bixby

At C Stands two Paper Mills one Sawmill & a Fulling Mill by the Lower Falls

At D Stands a Snuff Mill & a Triphammer Shop

Errors Excepted, Jonathan Kingsbury, Junr., Surveyor



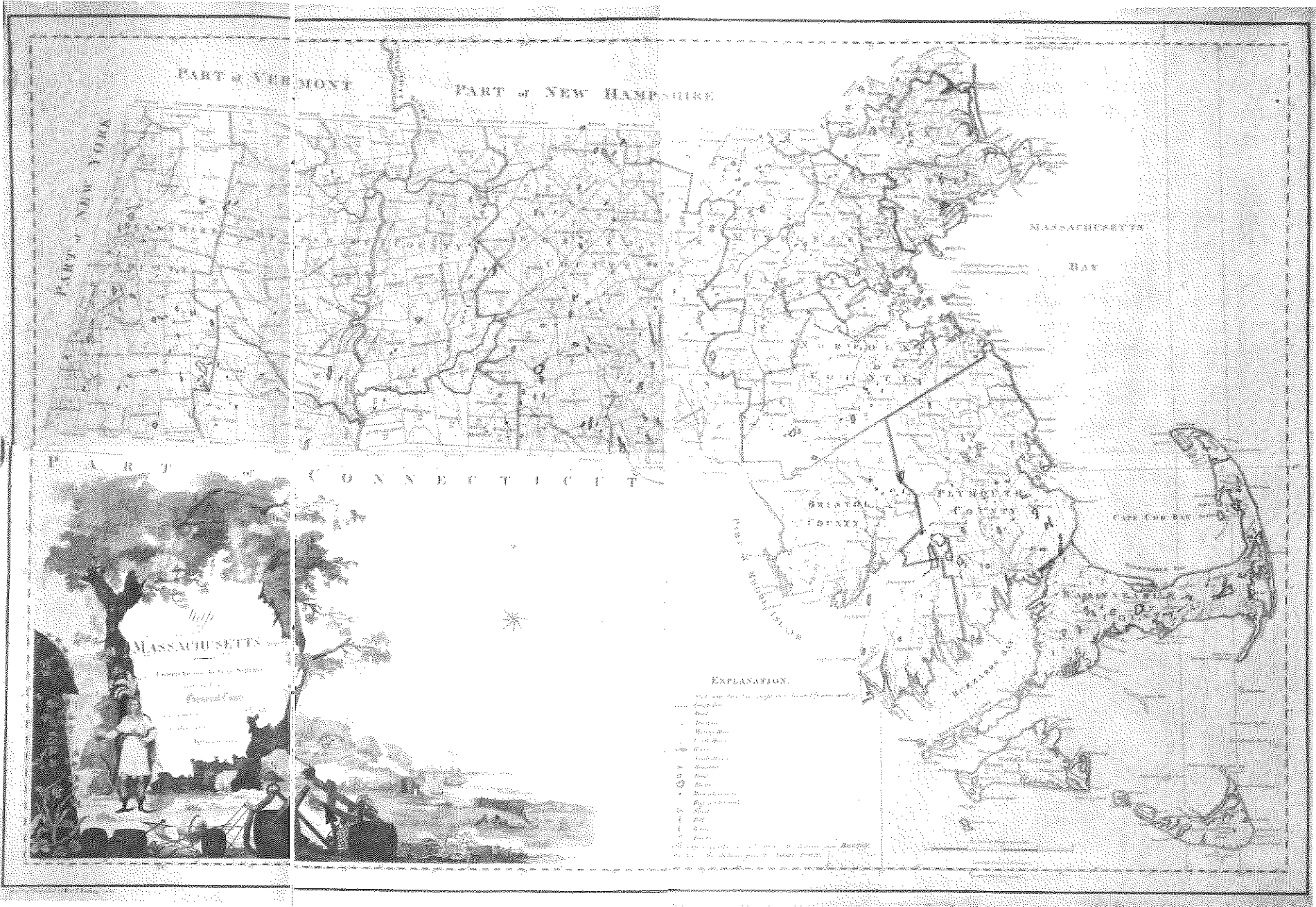
Map of Massachusetts Proper, 1802

Engraved by Samuel Hill and Joseph Callender, after Osgood Carleton
Boston: Published by Benjamin & Josiah Loring, 1802 (second edition)
Courtesy of the Massachusetts Historical Society

*an accurate Map of this Commonwealth
will tend to facilitate & promote such
information and improvements as will be
favorable to its growth and prosperity . . .*

Chapter 101, Acts & Resolves of the
Commonwealth of Massachusetts, 1794

After the American Revolution, maps were needed to describe the states in the new Republic, and the federal government was not organized to undertake such projects. In Massachusetts, interested parties, including members of the newly founded Massachusetts Historical Society, approached the General Court about the need for a state map, and in 1794 a law was passed requiring local surveys to a standard scale. Towns were directed to show all boundaries between adjacent towns, all rivers, bridges, and county roads, all public buildings, and distances from the Shire Town (Cambridge) and the Metropolis of the Commonwealth (Boston). These town surveys, although of uneven quality, were put together to create the first official Massachusetts State Map.

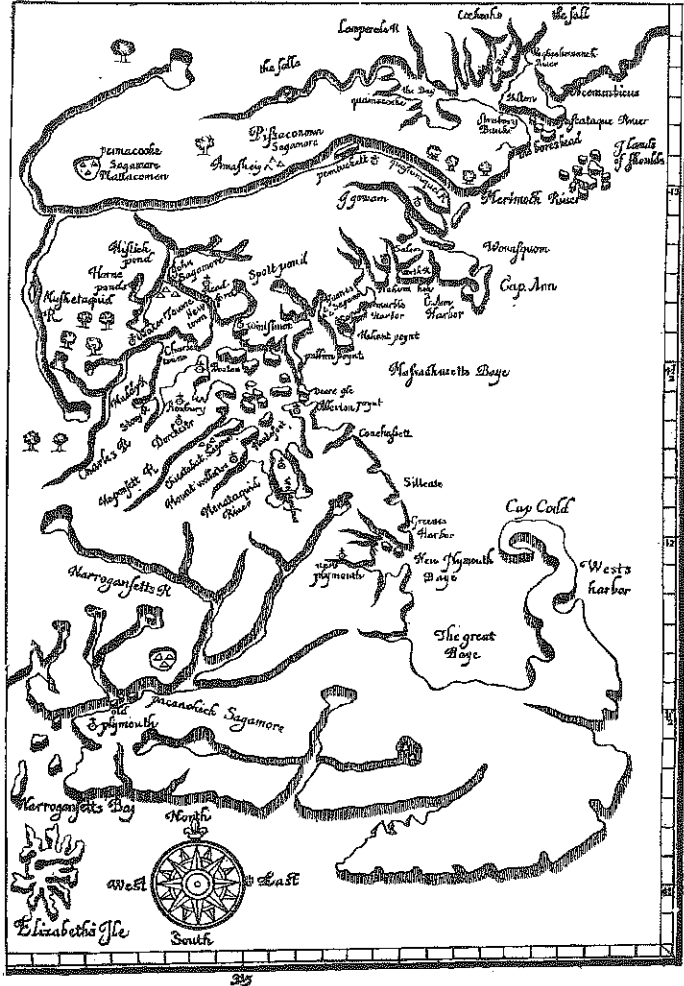


The South part of New-England, as it is Planted this yeare, 1634
William Wood

A true, lively and experimental description of that part of America, commonly called New England: discovering the State of the Countrey, both as it stands to our new-come English Planters; and to the old native Inhabitants.
William Wood

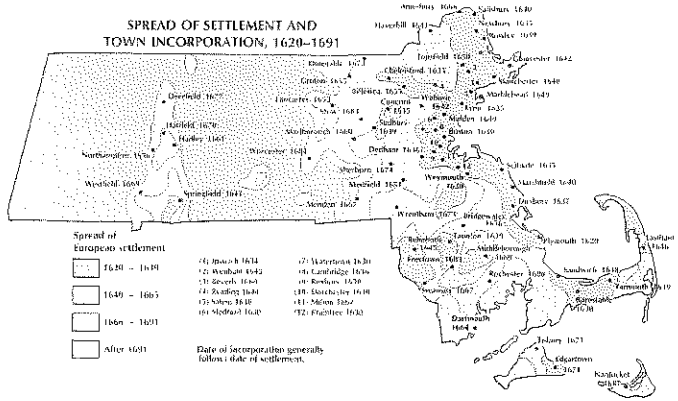
This map, the oldest known map showing Boston and the surrounding towns, was drawn by William Wood for his book *New Englands Prospect*. The New Town was settled in 1634 and became known as Cambridge when Harvard College was established.

The South part of New-England, as it is Planted this yeare, 1634.



Spread of Settlement and Town Incorporation, 1620-1691
Historical Atlas of Massachusetts, 1991
Reproduced with permission of the publisher, The University of Massachusetts Press

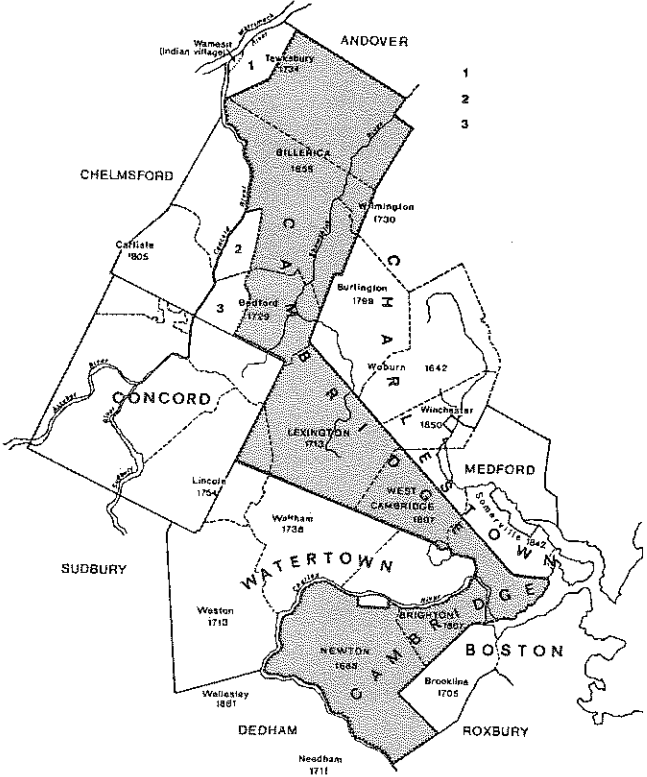
From the earliest English settlements in Plymouth (1620) and Boston (1630) the colony grew rapidly, settling coastal towns and moving inland as far as Worcester by 1691. Cambridge was incorporated 1636. Incorporation dates for the towns (including Newton) that were initially part of Cambridge are shown on this plan.



Plan of Cambridge

Compiled by Robert M. Nylander, 1977
Courtesy of the Cambridge Historical Commission

At its fullest extent, Cambridge included lands that later became Billerica, Bedford, Lexington, Arlington, Brighton, and Newton. Newton was incorporated as a town in 1688 and given the name Newton in 1691. (Newton was sometimes written New Town or Newtowne.)



Northdistrict, 1832

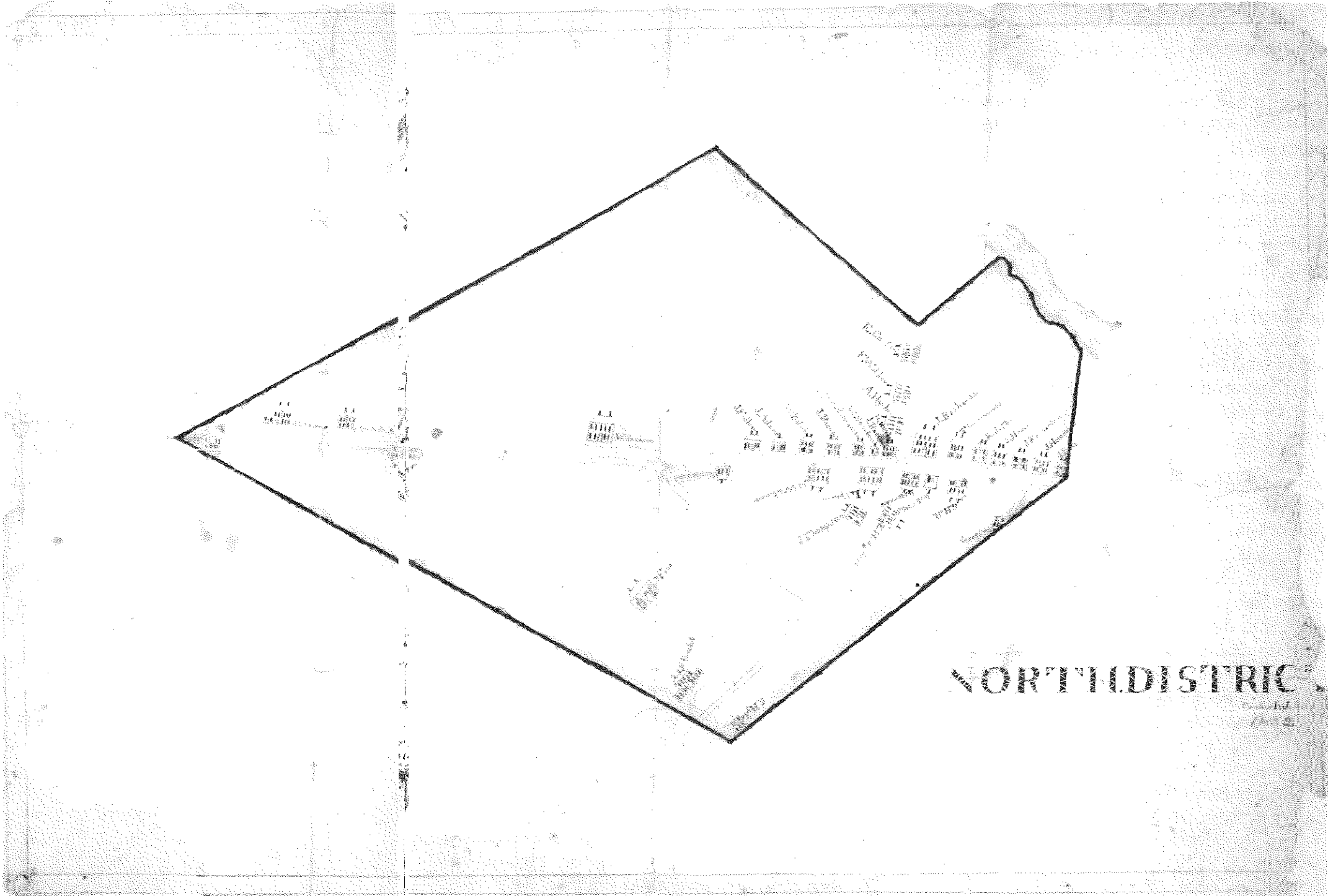
Caroline Bennett Jackson

Caroline Bennett Jackson was the daughter of William and Mary Bennett Jackson. Caroline attended the Newton Female Academy at a time when girls in private schools learned to draw maps as a part of their geography lessons. The map shows the Jackson home and others along Washington Street as well as the village area to the east that was then known as Angier's Corner. Caroline's familiarity with the area is evident as each homeowner is named. Although the date is added in pencil (possibly by another hand) it can reasonably be assumed to be correct as it was drawn before the Boston and Worcester Railroad Corporation began construction.



Caroline Bennett Jackson (1819-1906)

Caroline, shown here in later years, would have been 13 when she drew the Northdistrict map.



Plan of Farm at Newton 1832

Francis Jackson

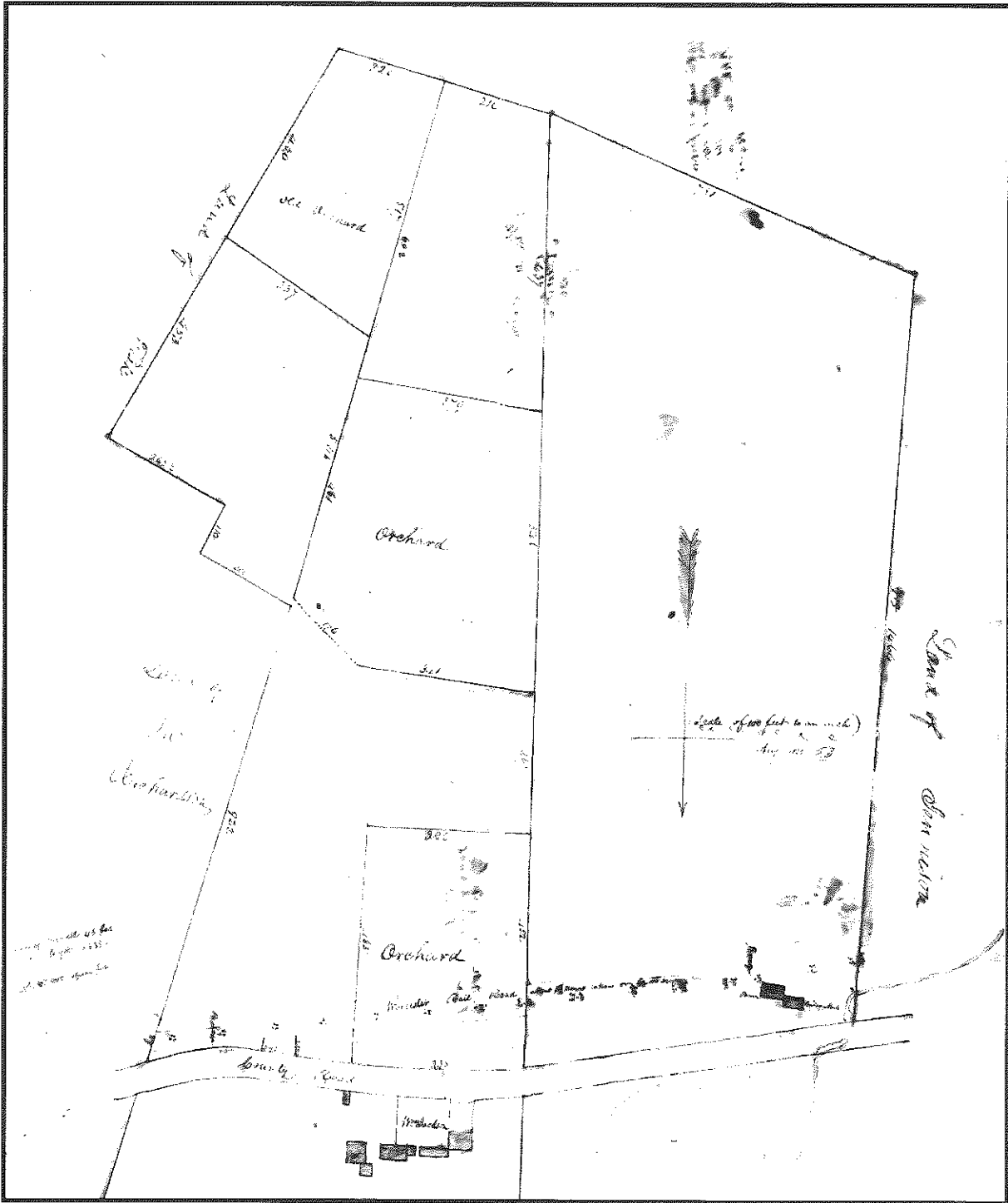
The farm had been in the Jackson family since the 1600s. After the death of Timothy Jackson, builder of the present Jackson Homestead (1809), the farm was divided between William who took the Homestead and land north of the County Road (Washington Street) and his brothers Francis and Steven who took land on the south side. This plan, drawn by Francis, shows the farm, including the Jackson Homestead on the north side of the road. In October of 1832 Francis and Steven sold just under an acre and a half of land to the Boston and Worcester Railroad Corporation. A separate deed spelled out the Jacksons' responsibilities to fence the area in perpetuity.

Francis' brother, William Jackson, was Chairman of the House Railroad Committee of the General Court from 1829 to 1831. In a major speech to the Legislature, he gave a lengthy discourse on the scientific and engineering aspects of rail and locomotive construction and the economic benefits of developing railroad transportation. After much discussion, the Boston and Worcester Railroad was chartered in 1831 and William was instrumental in persuading the corporation to choose a route through Newton. A Report to the Directors in the following year included maps showing the new route, in part paralleling the County Road (Washington Street) and running directly in front of the family Homestead.



Francis Jackson 1789-1861

Although Francis lived in Boston, he maintained a life-long connection with Newton. He wrote a *History of Newton*, published in 1854.



Map of the Town of Newton, Mass., 1831

Surveyed by E. F. Woodward & W. F. Ward Nov. 1831
Annin, Smith & Co. Lithography, Boston

April 1830, Town Meeting Warrant #2:
*For the town to determine what course they
will adopt relative to a survey of the Town
according to the Law.*

The first state map, published in 1801, was soon out-dated. There were new turnpikes, canals, and railroads and town populations were growing, particularly as emigration from Europe increased. In 1830, the General Court required towns to produce new surveys to update the state map. At an April town meeting, the Newton Selectmen voted to engage Town Clerk, Elijah F. Woodward, and William F. Ward to undertake the survey, which took several years. Town records show that payments were made for the completion of the plan in 1832.

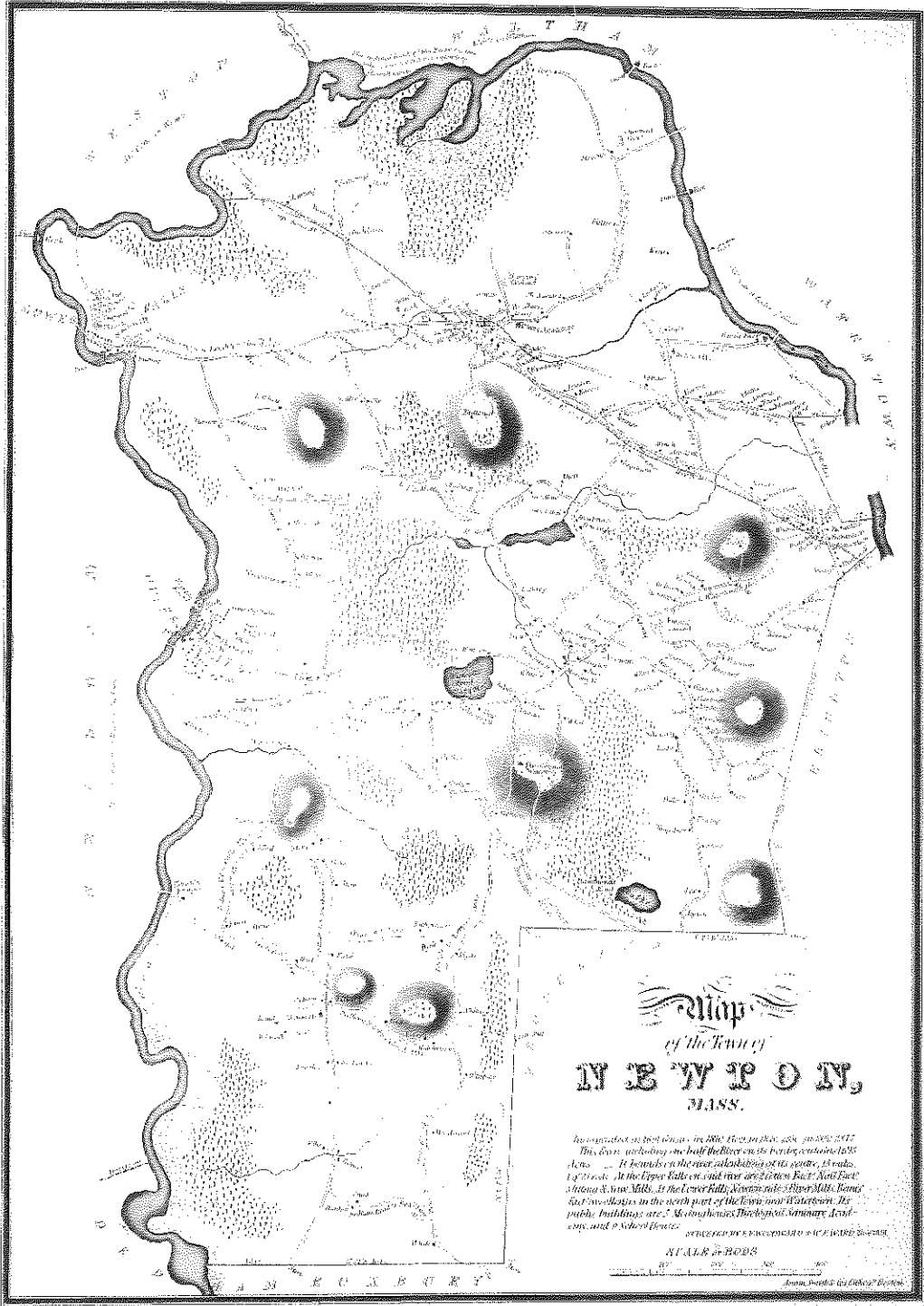
The plan was to be reproduced by lithography, a new printing process that was much cheaper than engraving. The selectmen voted to purchase 1000 copies of the map and give one to each family "gratis," with the others to be sold "as wanted." The lithographed copy, dated 1831, shows the tracks of the Boston and Worcester Railroad, which was only in the planning stages at that time.

A Topographical Map of Massachusetts, compiled under the direction of Simeon Borden, incorporated the results of the 1830 town surveys and was published in 1844.

Plan
of the Town of
NEWTON
from Surveys taken in 1830 & 1831
and plotted on a Scale of 100 Rods to an Inch
E. F. Woodward & W. F. Ward
Surveyors

Title from the first survey, 1830

A copy of the first Woodward and Ward survey done in 1830 can be found in the Collections of the Massachusetts Archives. The title, hand written by the surveyors, is signed with a flourish.



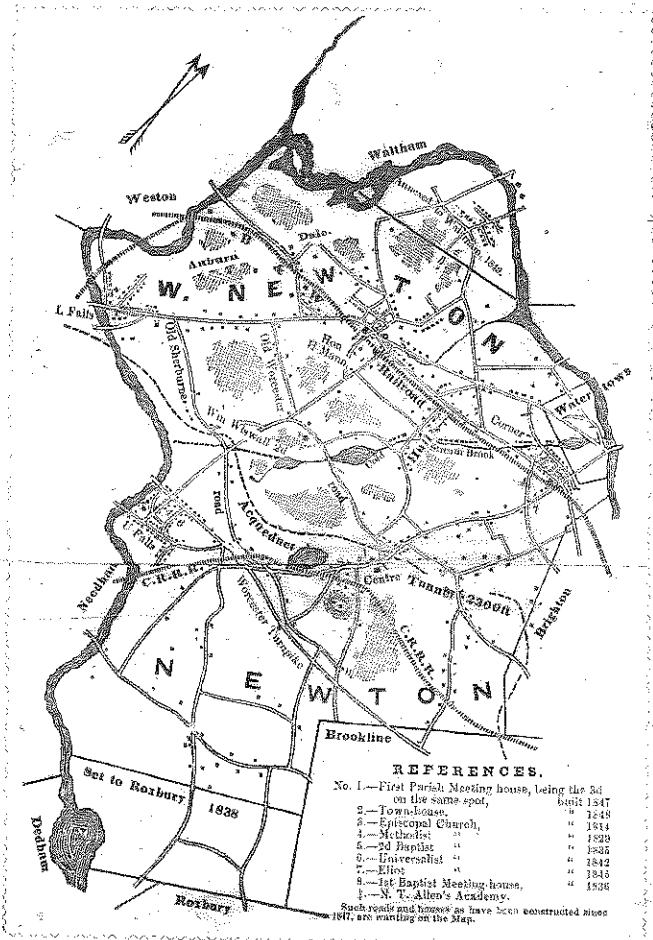
Map Showing Proposed Division of the Town, 1847

Seth Davis

West Newton resident Seth Davis was a teacher, first in the public schools, and later in a private school that he established in 1817. Among other things, he introduced the study of geography and taught students the skills of mapmaking. In 1847, he published *An Appeal to the Citizens of Newton*, supporting a move to divide the town. The first map (far right), which was included in the *Appeal*, shows the proposed dividing line.

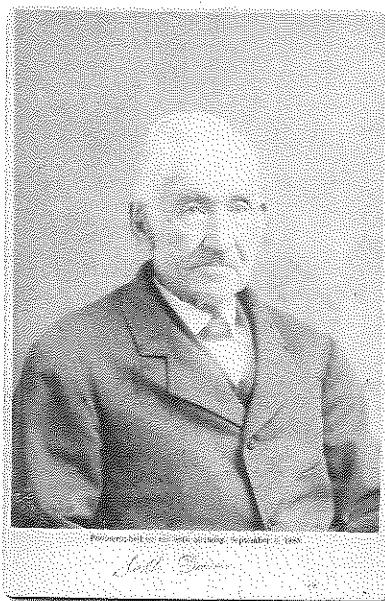
Although a physical center could be mathematically determined, because of the early pattern of dispersed settlement the town had no definable population center; Newton Centre remained isolated throughout the first half of the nineteenth century while north-side villages served by the Boston and Worcester Railroad began to grow. In the 1830s and 40s, a group of West Newton residents pressed for a division of the town, but in 1848, the Town determined to maintain a single corporate identity.

Davis' description on the second, undated map (right), refers to the town's growth since 1847 and to concern about finding a central location for the first "pure" High School. He notes that "The spot now proposed is near the word HULL . . . which is far from being either in the centre of territory or population." The proposed location was at Hull's Crossing, later called Newtonville. The High School was built there in 1859.

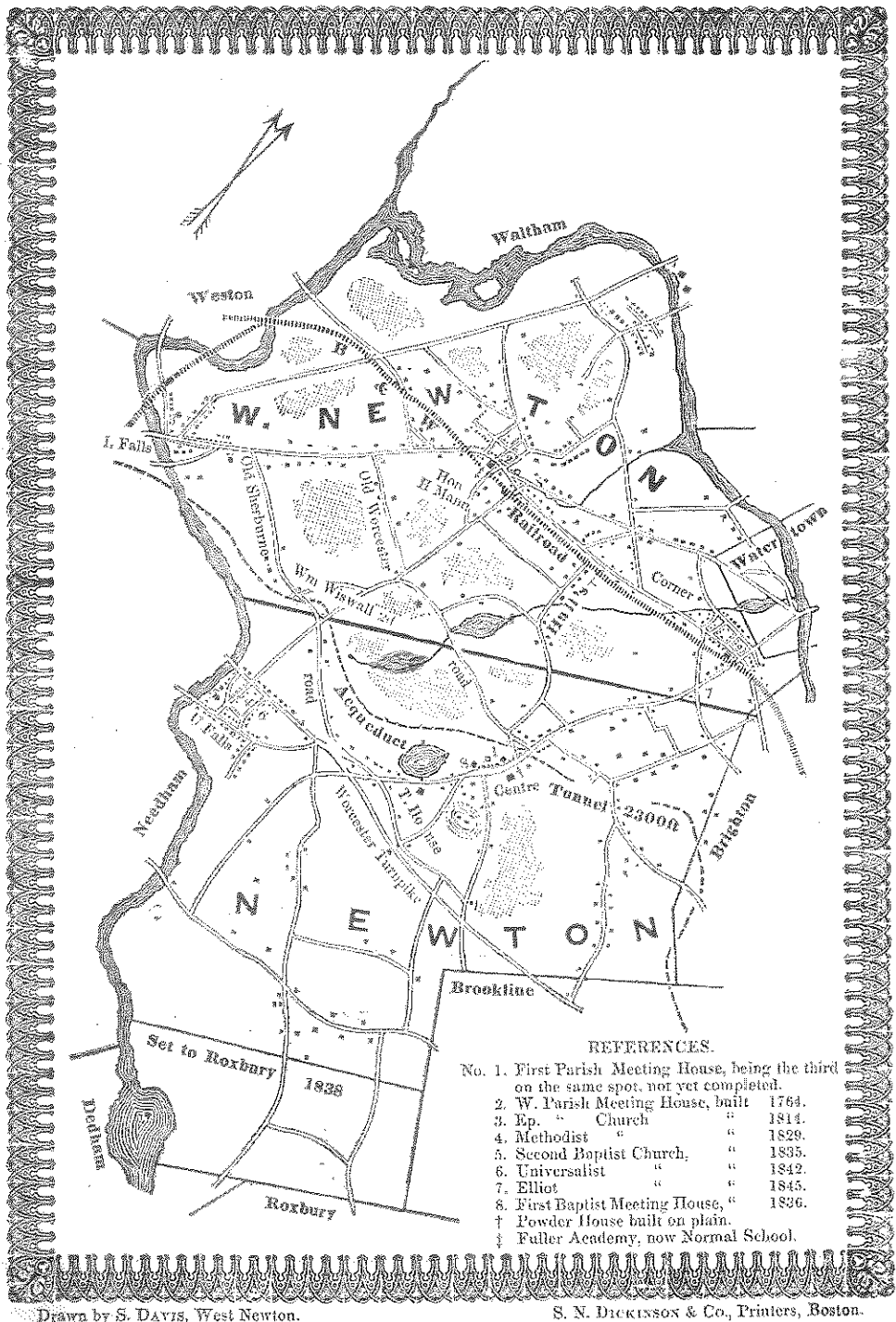


The above Map is a correct outline of the several villages in the Town,—now containing seven Post-Offices, about 1,500 inhabitants, more than a score of clergymen, fifteen places of public worship, eighty miles of roads, and a fine proportion of professional gentlemen in almost every department.—but as will be perceived, without any common centre, owing to its peculiar physical features, which must forever preclude the existence of only one purely High School, without creating and perpetuating a spirit at variance with the peace and harmony of the whole Town. The spot now proposed is near the word HULL, on this above Map, which is far from being either in the centre of territory or population.

Map showing proposed location of the new High School
Seth Davis, n.d.



Seth Davis
on his 98th birthday, 1885



Drawn by S. DAVIS, West Newton. S. N. DICKINSON & Co., Printers, Boston.

Map of the Town of Newton, 1848

Surveyed by E. F. Woodward and W. F. Ward, November 1831

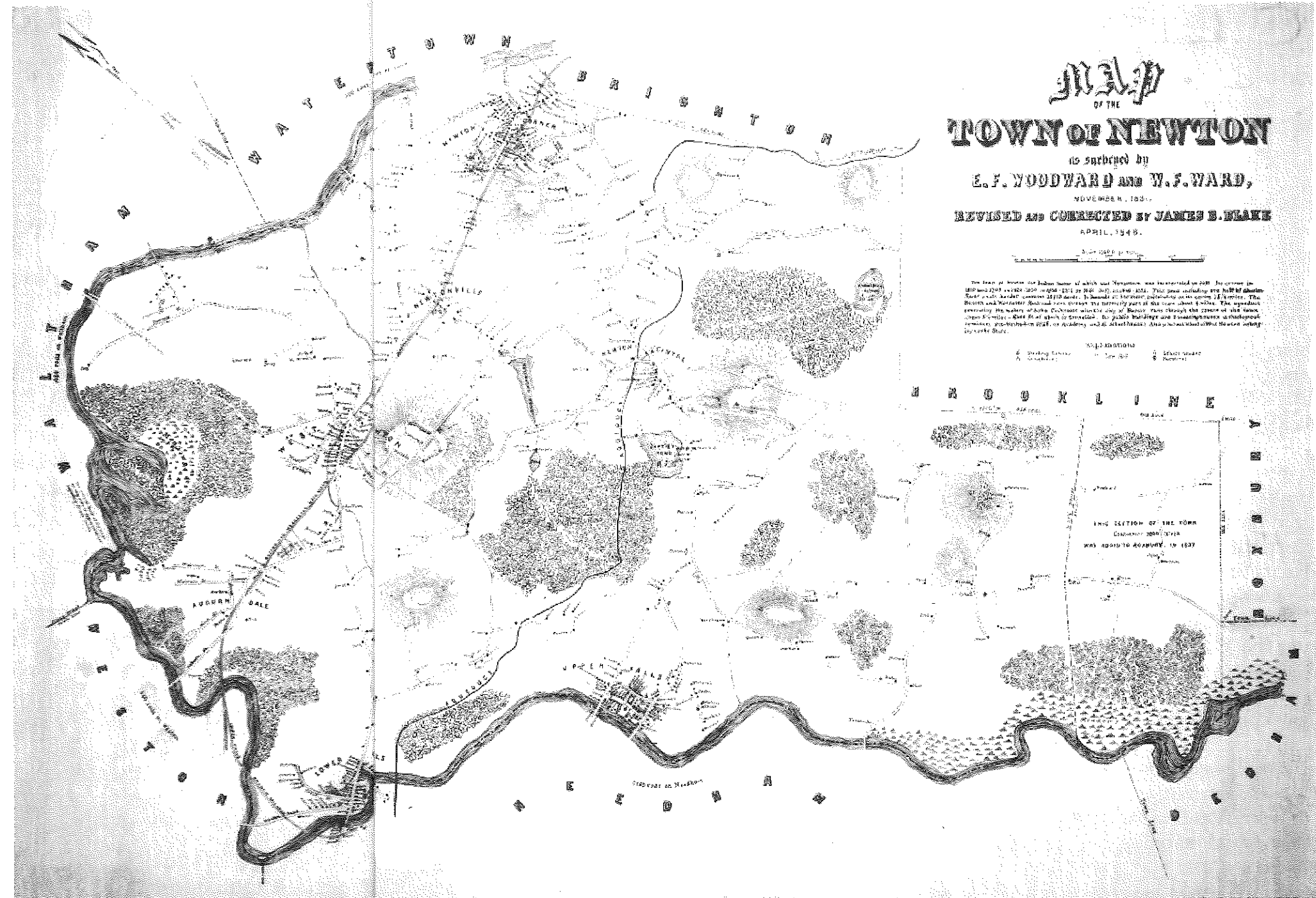
Revised and Corrected by James B. Black, April, 1848

to be correctly and fairly delineated... the changes in the boundaries of towns, the course of new roads, rail-roads and canals, and other topographical alterations within the limits of the county

An Act for the Correction of the State Map
Chapter 241, Acts & Resolves of the
Commonwealth of Massachusetts, 1846

In 1846, an Act of the General Court required the continued updating and correcting of the State Map. There was a fine of \$100 for non-compliance. James B. Black made revisions and corrections to the Newton survey, using the 1831 survey as a base. An obvious change was the transfer of eighteen hundred acres on the south side to Roxbury in 1837. It is interesting to note that although new villages were emerging, there is as yet little development along the railroad track, while there are significant population clusters in the industrial villages on the river at Upper and Lower Falls.

The copy shown in the exhibition is a pen and ink drawing on glazed linen. Lithographed copies were also made when the map was published in 1848, and reproduction copies of the published map are available today.



Map of the Town of Newton Middlesex County, Mass, 1855

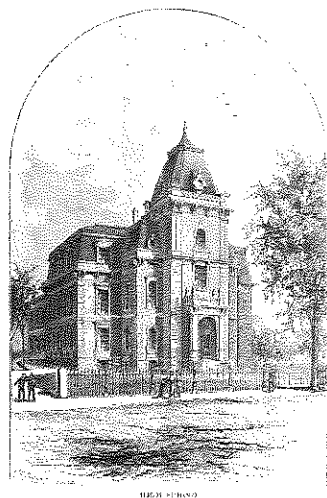
H. F. Walling, Superintendent of the State Map
Lithograph of Sarony & Co., 117 Fulton St, N.Y.

the inconveniences and disadvantages arising from these numerous inaccuracies have been very great . . . Mr. Walling, who has been commissioned by the State authorities to superintend the revision of the State Map. . . is understood by the Committee to be competent for the task . . .

Joint Special Committee
on the State Map, 1855

Since 1794, town surveys made by local surveyors had been uneven in their results and when put together in the county and state maps revealed inaccuracies that were difficult to reconcile. Boundaries were not consistent; roads and natural features, such as brooks and rivers, did not connect between one town and another. In 1853 the General Court passed an "Act for the Correction of the County Maps" and in 1855, Henry Francis Walling was engaged to "to renew the local surveys both of the counties and the towns." By 1855, Walling, a skilled mapmaker, had already published over twenty Massachusetts town maps and by the end of the decade, more than fifty. Walling was among the most prolific and best-known nineteenth-century mapmakers and publishers. He had a long and distinguished career and was highly respected for his contributions to the development of the profession and to the promotion of federal-state survey and mapping projects.

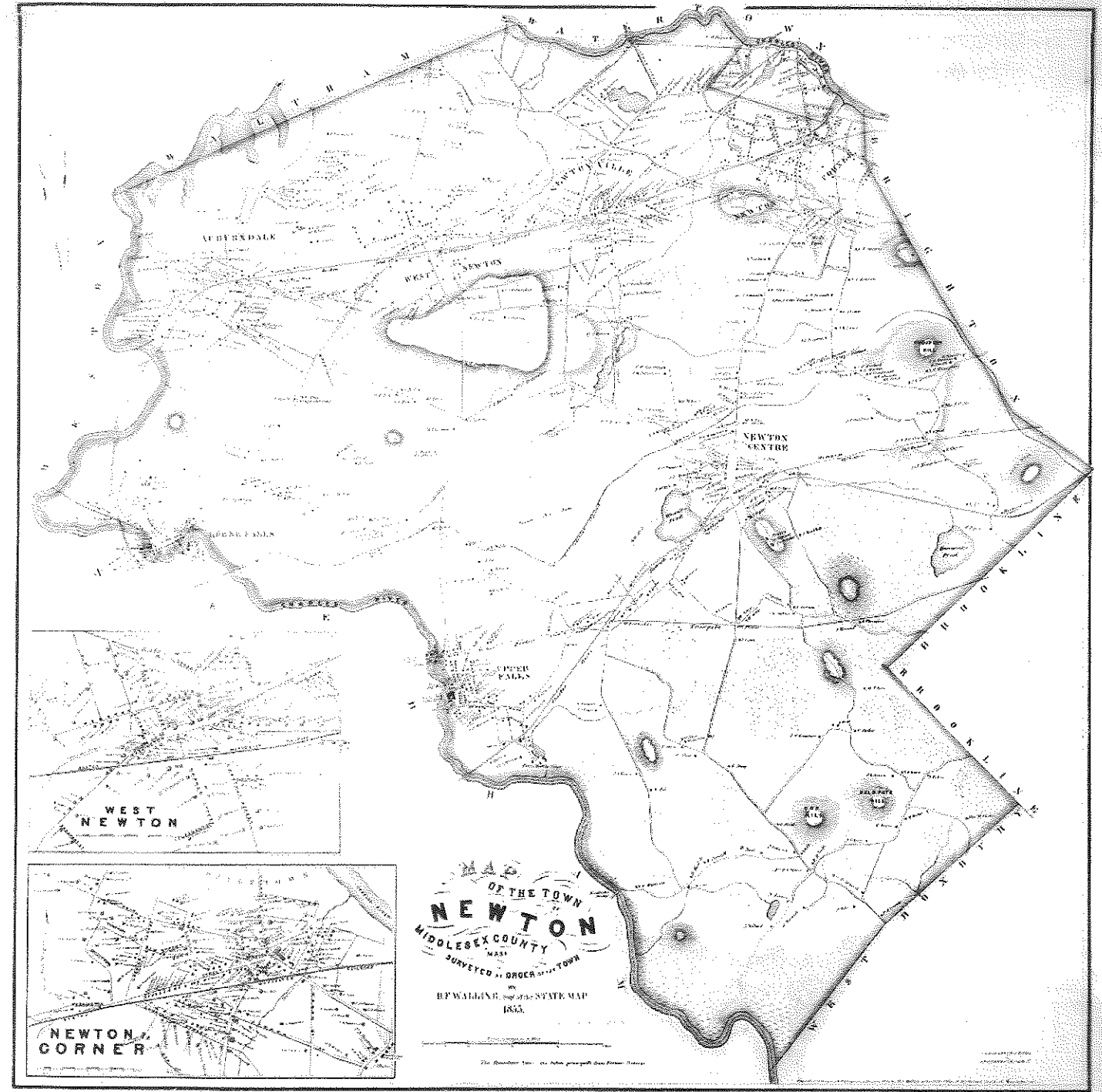
Walling's map of Newton was the first to present the town in a shape and orientation, with north at the top of the page, which is familiar today. The eighteen hundred acres transferred to Roxbury shown on the 1848 map and the six hundred acres around the chemical factory annexed by Waltham shown on the un-dated Davis map were the last significant boundary changes. The extension of Beacon Street and the new Charles River Railroad through Newton Centre to Upper Falls were important milestones of mid-century development. This map, together with other town and city maps, was used to put together substantially improved county and state maps.



Newton High School, 1859

J. S. Conant, Boston

This building was located on Walnut Street in Newtonville.



Newton 1700

Francis Jackson

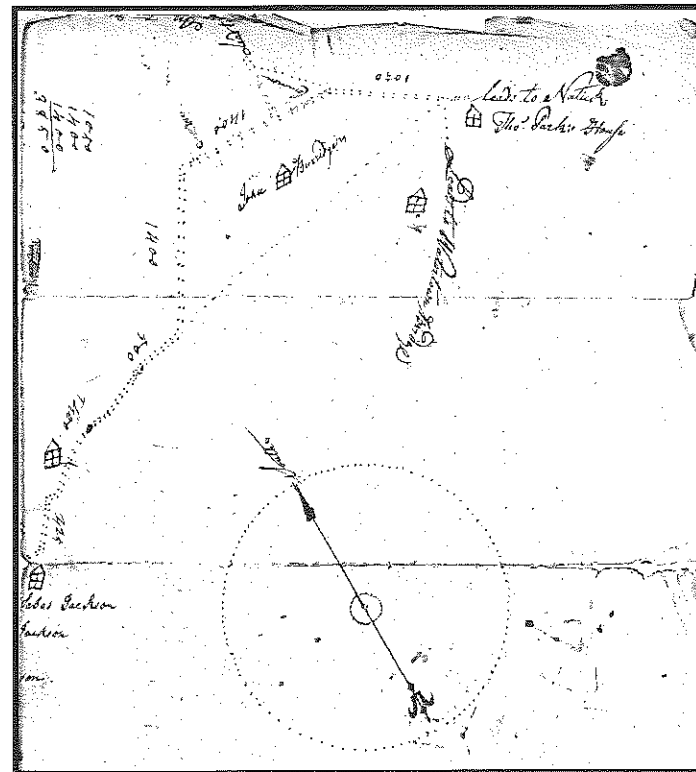
Published in *History of Newton*, 1854

We have prepared this Plan, not only to show the progress of settlement, but also to aid those who may be desirous of finding the spot where their ancestors first erected their habitations...

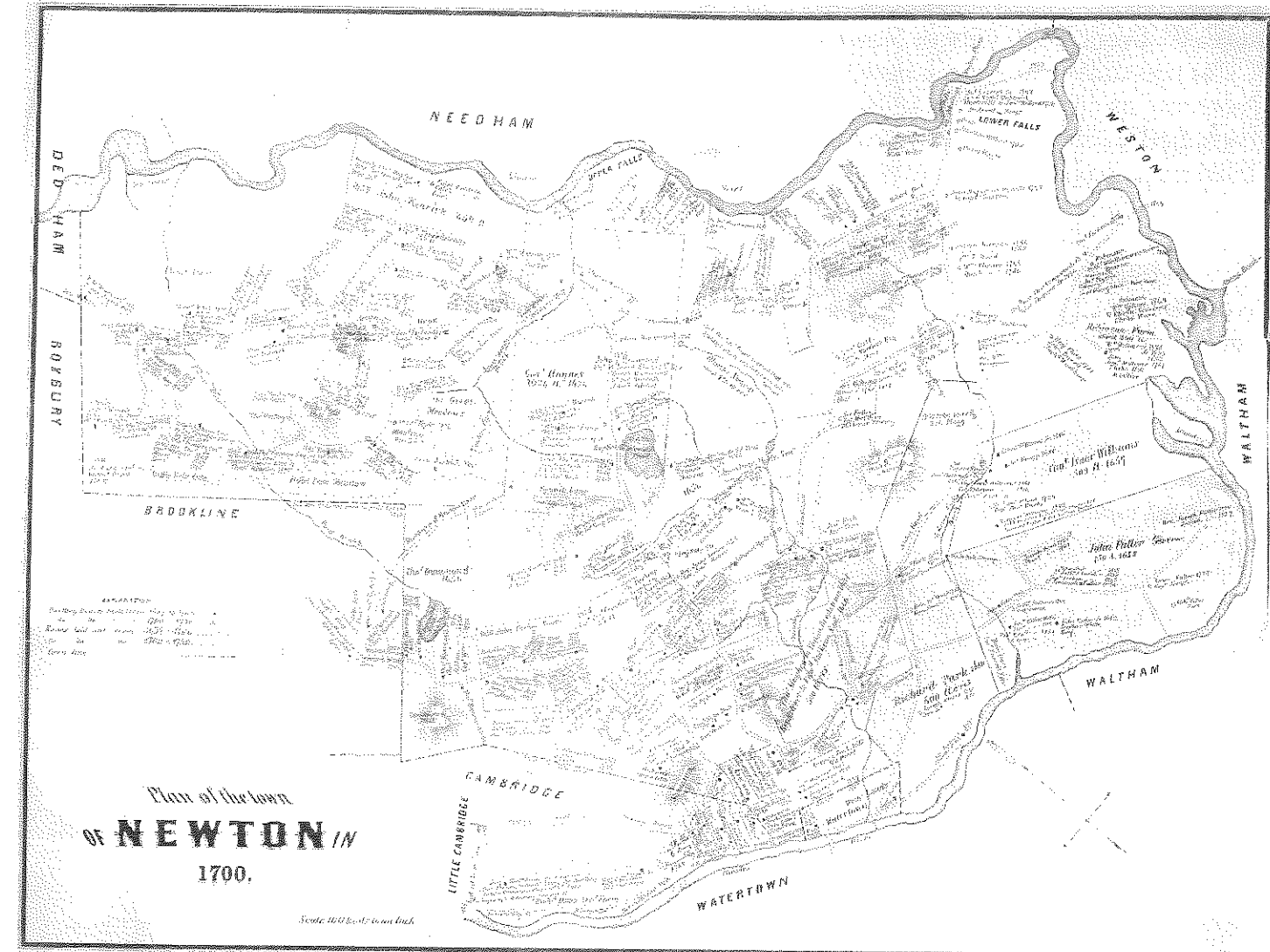
Francis Jackson

In 1854, Francis Jackson published his *History of Newton* which included a plan of Newton, 1700. Using the 1831 survey by Woodward and Ward, Jackson attempted to reconstruct Newton's early highway system and show the progression of ownership of homesteads from the earliest settlement up to 1750. His resources included the records of the Massachusetts Bay Colony, Middlesex County deeds and wills, and the Newton Town Records, particularly the reports of the Surveyors of Highways.

This detail of a rare, hand-drawn plan made in 1765, shows the re-location of a section of the County Road, also known as the road to Natick. This plan would have been among the early highway records available to Jackson for his research.



Plan of County Road
(Washington St.), 1765 (detail)
Courtesy of the City of Newton Archives



Outline Map of Newton City, Middlesex County, 1875

Middlesex County Atlas, F. W. Beers & Co.

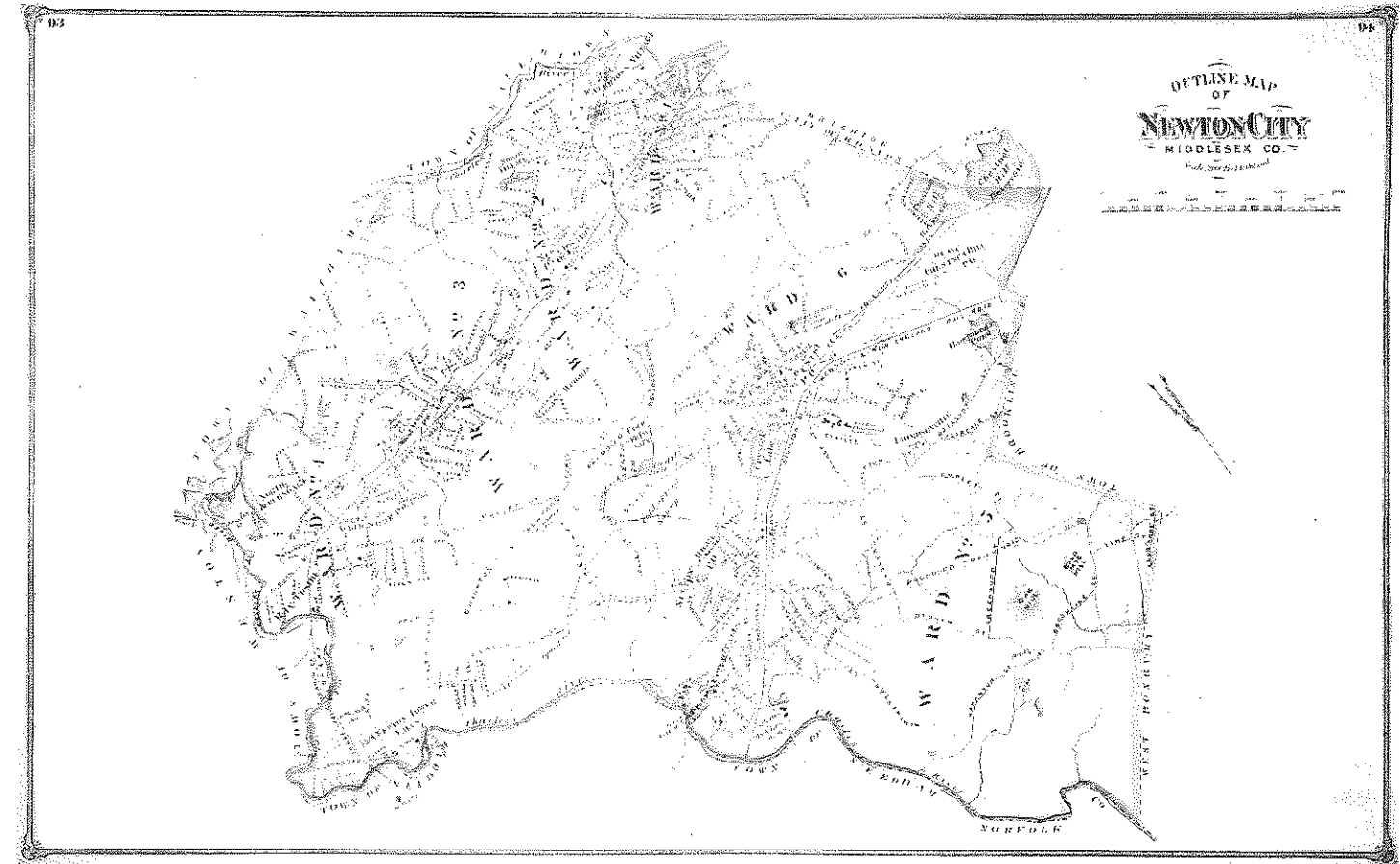
This map with ward lines, which first appears in the F. W. Beers & Co. City of Newton Atlas (1874) was drawn to show a new political entity. Receiving its city charter in 1873, Newton, the town, had withstood various proposals for division, as well as overtures from the City of Boston for annexation; its population was just over 16,000. While the villages, of which there were only ten at the time, retained their distinctive identities, the citizens as a whole chose to create a city that has prospered and is now home to more than 80,000 people.

In the mid-to-late nineteenth century, publishers such as Walling, Hopkins, Beers and others, used previously published individual town and city maps to create Town, City, State and County Atlases. Historical data and descriptions, such as Jackson's Historical map of Newton, were included to enhance the detail in these new products. The Homestead's collections include City of Newton atlases made approximately every ten years between 1874 and 1929, and the Middlesex County Atlas of 1875.



City Hall, 1876

The West Newton Meeting House was renovated to become the Town Hall in 1848 and updated to become the City Hall in 1874. The seat of government remained in West Newton until 1932 when the present City Hall was built nearer the "centre."



Bibliography

Binford, Henry C. *The First Suburbs, Residential Communities on the Boston Periphery, 1815-1860*. Chicago and London: The University of Chicago Press, 1985.

Jackson, Francis. *History of the Early Settlement of Newton, County of Middlesex, Massachusetts, From 1639 to 1800 with a Genealogical Register of its Inhabitants Prior to 1800*. Boston: Stacy and Richardson, 1854.

Jones, Robert Willoughby. *Boston & Albany, The New York Central in New England. Volume I: Boston to Worcester*. Los Angeles, California: Pine Tree Press, 1997.

Kreiger, Alex , and David Cobb, with Amy Turner. *Mapping Boston*. Cambridge, Mass.: MIT Press, 1999.

Massachusetts. Acts & Resolves of the Commonwealth of Massachusetts. 1794.

_____. Acts & Resolves of the Commonwealth of Massachusetts. 1830.

_____. Acts & Resolves of the Commonwealth of Massachusetts. 1846

_____. Acts & Resolves of the Commonwealth of Massachusetts. 1853.

Newton. Town Meeting Records. 1830.

_____. Town Meeting Records, Book II.

Newton, City of. *Acts of the General Court Relating to the Town and City of Newton, 1687 to 1929*. Newton: The Graphic Press, 1930.

Ristow, Walter. *Maps and Mapmakers, Commercial Cartography in the Nineteenth Century*. Detroit: Wayne State University Press, 1985

Ritter, Priscilla R. and Thelma Fleishman. *Newton, Massachusetts, 1679-1779, A Biographical Directory*. Boston: The New England Historic Genealogical Society, 1982.

Smith, Samuel Francis. *History of Newton, Massachusetts. Town and City From its Earliest Settlement to the Present Time. 1630-1880*. Boston: The American Logotype Company, 1880.

The Litchfield Historical Society. *To Ornament Their Minds: Sarah Pierce's Litchfield Female Academy 1792-1833*. Litchfield, Connecticut: The Litchfield Historical Society, 1993.

Wilkie, Richard. W. and Jack Tager, editors. *Historical Atlas of Massachusetts*. Amherst: University of Massachusetts Press, 1991.

Wood, William. *New Englands Prospect 1634*. Reprint, Amsterdam: Theatrum Orbis Terrarum Ltd. and New York: Da Capo Press, 1968.

Internet Resources

www.ci.newton.ma.us

Use the section on City of Newton GIS maps

www.hcl.harvard.edu/maps/
Harvard College Map Library

[/lcweb2.loc.gov/ammem/gmdhtml/gmdhome.html](http://lcweb2.loc.gov/ammem/gmdhtml/gmdhome.html)
Library of Congress, American Memory, Map Collections 1500-1999

www.mappingboston.org
Explore Boston and New England maps

www.nationalgeographic.com/maps
Connect to the National Geographic Map Machine

www.state.ma.us/lib/
Massachusetts State Library

www.magnet.state.ma.us/sec/arc
Massachusetts State Archives

www.usgs.gov/education
Play with U.S. Geological Survey resources on map-making and geography

www.surveyhistory.org
Visit the Virtual Museum of Surveying to explore tools used to make maps

For Further Research

(available at The Jackson Homestead)

Atlas of the City of Newton Massachusetts
New York: F. W. Beers & Co., 1874

Atlas of the City of Newton, Middlesex Co., Massachusetts
Philadelphia: G. M. Hopkins & Co., 1874

Atlas of the City of Newton Massachusetts
New York: J. B. Beers & Co. 1886

Atlas of the City of Newton Massachusetts
Philadelphia: G. W. Bromley & Co. 1895

Atlas of the City of Newton Massachusetts
Philadelphia: G. W. Bromley & Co. 1907

Atlas of the City of Newton Massachusetts
Philadelphia: G. W. Bromley & Co. 1917

Atlas of the City of Newton Massachusetts
Waltham & Newton: Rowland H. Barnes, 1929

Acknowledgements

Many people have contributed to this exhibition, beginning with the eighteenth- and nineteenth-century surveyors and mapmakers whose maps are on display. Without their work, we would not have the historical and artistic record that engage student and scholar alike, providing insight into the past, connections to the present, and delight in the intricate patterns that describe our world.

City Departments collaborating with The Jackson Homestead and the Newton Historical Society include the Newton City Archives, the City of Newton Engineering Department, the City of Newton Information Technology Department, and the Newton Free Library. Particular thanks go to Pricilla Ritter, Joseph Cancellieri, and Douglas Greenfield of those departments.

Special thanks go to David Olson and Sheila Sibley for their encouragement and support and to Thelma Fleishman for essential editorial assistance. The work was made better with their help.

Susan D. Abele, 2001

Credits:

Design and Layout by David A. Olson

Printing by Signal Graphics, Newton

Photography by Color Services, Needham

©The Jackson Homestead, Newton's Museum and Historical Society. Newton, Massachusetts

Funding for the **Rivers, Roads & Rails: Mapping Newton** exhibit and this booklet have been provided in part by:

Color Services of Needham

The City of Newton

The Newton Historical Society

The Massachusetts Cultural Council